

II. REMARKS

In response to the Office Action dated December 5, 2005, claims 1 to 35 are presented for examination, of which claims 1, 17, 21 and 34 are independent. Claims 1, 3, 21 and 23 have been amended. Reconsideration is respectfully requested.

The Office Action objected to the specification for using an incorrect reference number in paragraph 25. Paragraph 25 has been amended as suggested. As such, reconsideration and withdrawal of the specification objection are respectfully requested.

The Office Action objected to claim 1 for allegedly failing to provide antecedent basis the claimed feature of “the transmitter.” In this regard, claim 1 was been amended to further clarify that a formation model is determined for “a formation in which a distribution of the plurality of transmitters are positioned in accordance with received signals of the plurality.” Claim 23 has been similarly amended. As such, reconsideration and withdrawal of the claim objections are respectfully requested.

Claims 3, 4, 23 and 24 were rejected under 35 U.S.C. § 112, second paragraph. More specifically, the Office Action contended that it was unclear how the “in accordance with the formation model” language in claims 3 and 23 related to the step of revising a parameter of the distribution model. In this regard, claims 3 and 23 have been amended to further clarify that “the method further comprises a step for revising a parameter of the distribution model in accordance with a determination of a formation in the formation model.” As such, claims 3 and 23 (and claims 4 and 24 dependent there from) are believed to comply with § 112, second paragraph. Accordingly, reconsideration and withdrawal of the § 112, second paragraph rejections are respectfully requested.

Claims 1 to 8, 11 to 27 and 30 to 35 were rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 6,483,453 (Oey). Claims 9 and 28 were rejected under 35 U.S.C. § 103(a) over Oey and further in view of U.S. Patent No. 6,657,578 (Stayton). Claims 10 and 29 were rejected under 35 U.S.C. § 103(a) over Oey and further in view of U.S. Patent No. 5,369,591 (Broxmeyer). The rejections are respectfully traversed.

Independent claim 1 recites a method for transmitting into a medium into which a plurality of transmitters may transmit. The method includes: (1) a step for receiving a plurality of signals, (2) a step for determining a distribution model of a distribution of transmitters of the

plurality in accordance with received signals of the plurality, (3) a step for determining a formation model of a formation in which a distribution of the plurality of transmitters are positioned in accordance with received signals of the plurality, (4) a step for determining a total transmit power for a subsequent period of time, wherein the total transmit power is determined in accordance with the distribution model and the formation model, and (5) a step for transmitting not more than the total transmit power during the subsequent period of time.

Independent claim 21 is a system claim that substantially corresponds to the method of independent claim 1.

The cited art does not disclose or suggest the features of independent claims 1 and 21, and in particular, does not disclose or suggest at least the features of determining a formation model of a formation in which a distribution of the plurality of transmitters are positioned in accordance with received signals of the plurality, and determining a total transmit power for a subsequent period of time, wherein the total transmit power is determined in accordance with the distribution model and the formation model.

Oey relates to a method for reducing transmit power for traffic alert and collision avoidance systems and airborne collision avoidance systems. More specifically, Oey relates to a “method for reducing Mode S tracking interrogation power as a function of range.” (Oey column 3, lines 1-4). Another embodiment of Oey teaches that aircraft flying in formation may minimize broadcast power by sharing information between a formation leader and other aircraft in formation. (Oey column 4, lines 7-10).

However, Oey is not seen to teach the steps of determining a formation model of a formation in which a distribution of the plurality of transmitters are positioned in accordance with received signals of the plurality, and determining a total transmit power for a subsequent

period of time, wherein the total transmit power is determined in accordance with the distribution model and the formation model. In this regard, the Office Action points to claims 11 and 14-15 in Oey to respectively teach these features.

Claim 11 in Oey claims a method step for, “for a plurality of aircraft flying in formation, inhibiting TCAS Surveillance interrogations from all but one of said plurality of aircraft flying in formation.” This does not suggest determining a formation model as is claimed in claims 1 and 21.

Claim 14 and 15 in Oey claims “adjusting transmission power of said Mode S tracking interrogation to track said Mode S aircraft in response to relative motion of said aircraft and said Mode S aircraft to minimize transmission power over time.” As such, Oey adjusts transmission power in response to relative motion of aircraft and does not determine a total transmit power for a subsequent period of time, wherein the total transmit power is determined in accordance with the distribution model and the formation model as is claimed in claims 1 and 21.

Accordingly, based on the foregoing remarks, independent claims 1 and 21 are believed to be allowable.

Independent claim 17 recites a method for tracking proximity of vehicles of a plurality, each vehicle comprising a transmitter for transmitting location information. The method includes: (1) a step for receiving the location information, (2) a step for determining a distribution model of a distribution of transmitters of the plurality, (3) a step for determining a formation model of a formation in which the transmitter is positioned, (4) a step for determining a total transmit power for a subsequent period of time, wherein the total transmit power is determined in accordance with the distribution model and the formation model, (5) a step for transmitting interrogations in accordance with the total transmit power, (6) a step for determining

a receiver sensitivity for receiving during the subsequent period of time, (7) a step for receiving location information, and (8) a step for determining a track of a vehicle of the plurality in accordance with the received location information.

Independent claim 34 is a system claim that substantially corresponds to the method of independent claim 17.

The cited art does not disclose or suggest the features of independent claims 17 and 34, and in particular, does not disclose or suggest at least the features of determining a formation model of a formation in which the transmitter is positioned, and determining a total transmit power for a subsequent period of time, wherein the total transmit power is determined in accordance with the distribution model and the formation model.

These features are substantially the same as those claimed in claims 1 and 21, and as such, independent claims 17 and 34 are believed to be allowable for the same reasons discussed above with reference to claims 1 and 21.

The remaining claims in the application are dependent from one of independent claims 1, 17, 21 and 34 and are also believed to be allowable.

III. CONCLUSION

In view of the amendments and remarks herein, this application is believed to be in condition for allowance and favorable action is requested. Applicants reserve the right to prosecute additional claims, including claims of broader scope, in this or any continuing application.

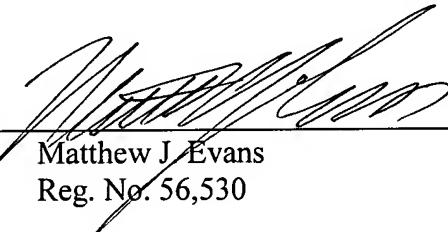
Applicants hereby petition for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the issue fee, for such extension is to be charged to **Deposit Account No. 19-3878**.

The Examiner is invited to telephone the undersigned at the telephone number listed below if it would in any way advance prosecution of this case.

Respectfully submitted,

Date: June 5, 2006

By


Matthew J. Evans
Reg. No. 56,530

SQUIRE, SANDERS & DEMPSEY L.L.P.
Two Renaissance Square
40 North Central Avenue, Suite 2700
Phoenix, Arizona 85004-4498
(602) 528-4124